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ABSTRACT

This guide provides an overview and a curriculum for the Education for Employment (EFE) program, which prepares students in targeted populations for independent living and productive careers. The courses encourage students to engage in activities that allow them to blend their academic and vocational studies and employment experiences to solve real-life problems, perform actual work, and produce real products. EFE includes programs for both disadvantaged students and students with disabilities. The guide is organized in three parts. The first part defines EFE, lists its goals, suggests program options, and provides information on student placement and continuation of services. The second part is the program curriculum. It includes related academic standards of learning for introductory level and levels I and II courses, a cooperative education component, and an all-aspects-of-industry component. Behavioral objectives for the various strands are listed and described. The third section of the guide contains curriculum development aids for competency-based education, including the following: task and competency lists, program design suggestions, instructional strategies, task analysis design, and sample task analysis. A task analysis worksheet is included. An appendix supplies definitions of academically and economically disadvantaged students and limited English proficiency students. (KC)

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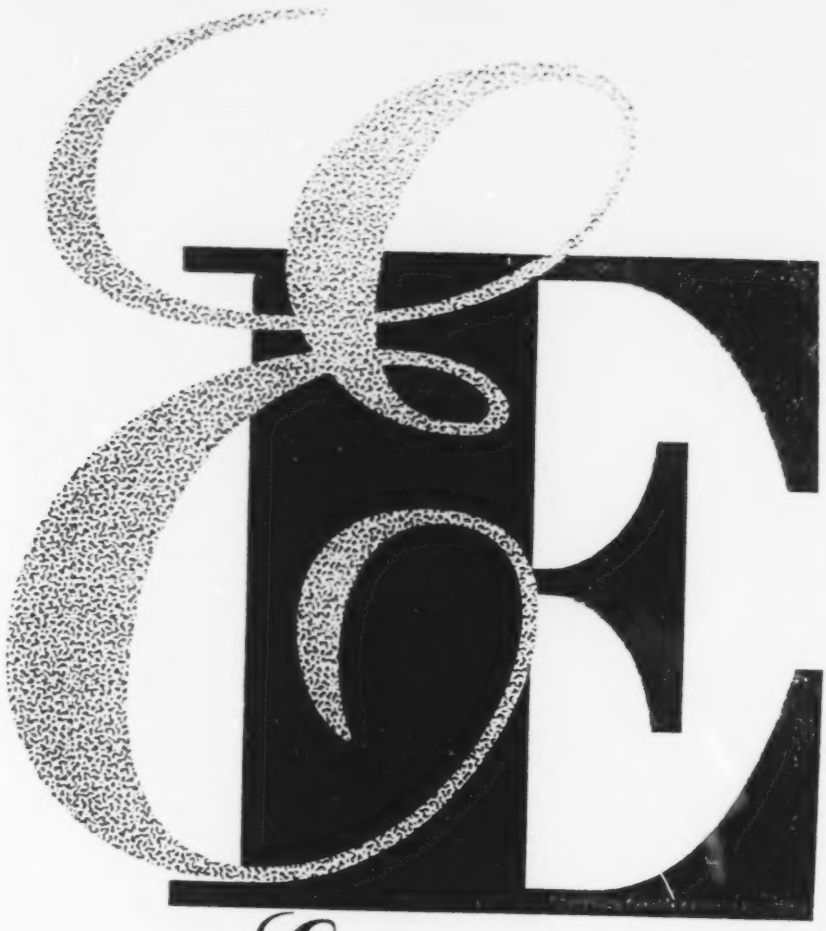

Education for EMPLOYMENT

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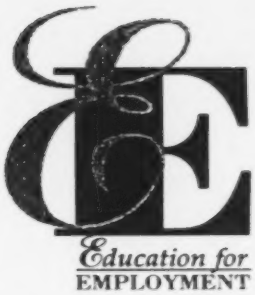

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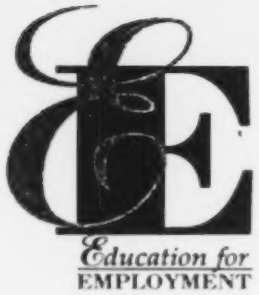

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Education for EMPLOYMENT

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PART 1: OVERVIEW

Education for Employment (EFE) prepares students belonging to targeted populations for independent living and productive careers. Students engage in activities that allow them to blend their academic and vocational studies and employment experiences to solve real-life problems, perform actual work, and produce real products.

Goals

Through continuous refinement and improvement of curriculum and services, teachers work to ensure that EFE programs meet the following goals:

- Rigorous standards in preparation for career pathways, employment, and further education
- Different approaches to gaining technical skills
- Multiple program entry and exit points
- School-to-career linkages.

Program Options

EFE includes programs for both the disadvantaged and the disabled student.

- The term *disadvantaged** refers to people (other than individuals with disabilities) who have economic or academic disadvantages and who require special services and assistance in order to succeed in vocational education programs. The term includes individuals who are members of economically disadvantaged families, migrants, individuals who have limited English proficiency, and individuals who are dropouts, or who are identified as potential dropouts, from secondary schools.
  *** See Appendix for complete definition.**

- The term *disabled* refers to individuals who
  - have mental retardation
  - are hard of hearing
  - are deaf
  - have a speech impairment
  - have a visual impairment
  - have a serious emotional disturbance
  - have an orthopedic challenge
  - have other health impairments
  - have specific learning disabilities
  - have multiple disabilities.

Students in the targeted populations described above have three program options:

- Option 1, **regular vocational education program:** for those who need few modifications of program to succeed
- Option 2, **regular vocational education program with supplemental services:** for those who are able to succeed with assistance from, for example, a resource teacher, assistive technology, curriculum support, or environment modifications

- Option 3, **individual vocational programs/courses:** for students who need an customized course of study within a vocational program area or in EFE

Program Objectives
Students enrolled in EFE

- develop employability, leadership, and living skills.
- prepare for career paths, occupational opportunities, and continuing education related to a specific vocational educational program area
- may experience the cooperative education method of instruction if 14 years old or older or if enrolled in EFE Cooperative Education I or II
- may exit EFE and enter a regular vocational education program or course.

To facilitate these objectives, EFE classes have limited enrollment. This provides increased individual, relevant, competency-based instruction, adjusted for learning styles, interests, and capabilities, and assisted or accelerated by technology. Each student has an individual learning plan based on appropriate assessments designed to maximize growth.

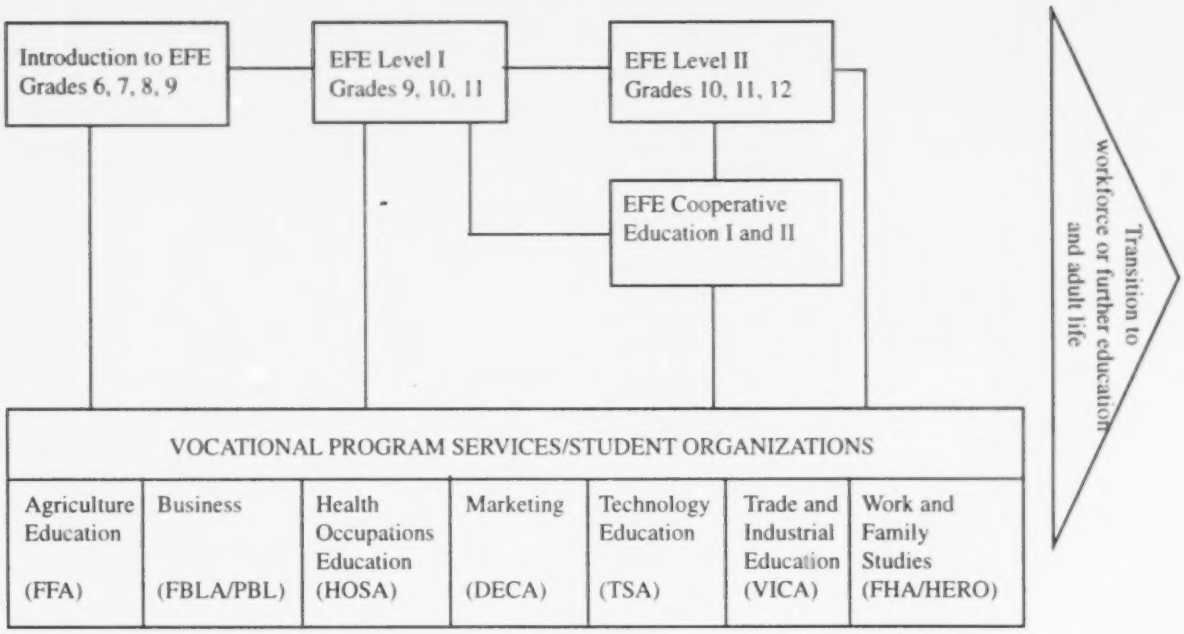
EFE enhances development of both work and independent living skills. by including these two strands in each level of the curriculum. Elements of self-management, human relationships, communication and social skills, self-advocacy, transition, leadership, teamwork, decision making, problem solving, conflict resolution, and responsible citizenship are included in the program of studies.

EFE Levels I and II may include a cooperative component that allows students to participate in paid or nonpaid, long- or short-term employment experiences as determined by the teacher, student, parent, and training sponsor. EFE Cooperative Education offers students the opportunity for a regular 540-hours-per-year paid work experience similar to that offered by other vocational programs.

Student Placement/Continuum of Services
Students may enter the EFE program at the level at which they are qualified and progress to the next level/course or exit into an appropriate vocational program service or nonvocational program for more specialized career preparation. Program access is illustrated by the chart on page 3.

EFE offers a continuum of services that transitions students from school to career. The basis of placement and individualized program development is the vocational assessment, which reveals student interests, aptitudes, and capabilities. Using the results of the assessment, the teacher is able to

- compile a student profile that identifies the student's learning style, levels of reading, math , social, and physical skills, and a one or more career clusters of interest.
- develop an individual vocational/career education plan that identifies (1) program area(s) for secondary school study and pathways to further education and work and (2) skills needed for independence.
- design school-based and work-based experiences that fulfill requirements of the plan and prepare the student for an entry-level position in the workforce or for additional education and training.



EFE Program Access

Serving students who belong to targeted populations involves an individualized program that

- contributes to preparation for optimum career and employment opportunities and further education.
- provides access to the same quality of course offerings, instruction, resources, equipment, and supplies as all students.
- provides learning experiences and transition activities based upon the individual education program (IEP) if appropriate for students with disabilities.

To ensure that the three planning considerations listed above are met, the customized individual program of study for each level of EFE should be based on the tasks/competencies outlined in Part 2 of this guide. These tasks/competencies are based on library research into and observation of successful programs in Virginia and other states, have been validated by the EFE Leadership Council, and are approved by the Virginia Department of Education. Local school divisions may modify the competencies based on employer demands or student needs if approved by the local vocational advisory committee.

School divisions that wish to phase in the restructured EFE levels may schedule the transition as follows:

- 1997-98: Introduction (eliminate old Level I); EFE Co-op I replaces WECEP I
- 1998-99: Level I (eliminate old Level II); EFE Co-op II replaces WECEP II
- 1999-2000: Level II (eliminate old Level III)

PART 2: PROGRAM CURRICULUM

INTRODUCTION

Recommended Grade Levels: 6, 7, 8, 9

Prerequisite: None

Course Options:

Disadvantaged (18 weeks) 9075
Disadvantaged (other than 18 weeks) 9076
Disabled (18 weeks) 9082
Disabled (other than 18 weeks) 9083

Students explore independent living and workplace skills by identifying individual assets, interests, aptitudes, talents, and current occupational abilities. Through practical experiences related to daily living and work, students determine strategies to improve their assets and ways to emphasize their strengths at home, school, and in the workplace.

Tasks/Competencies

STRAND: EXPLORING INDEPENDENT LIVING

1. Identifying Individual Assets

1.1 Identify intellectual assets.
Achievement Measure: Assets are identified by documented assessment of basic academic, problem-solving, communication, and decision-making skills.

1.2 Identify social and emotional assets.
Achievement Measure: Assets are identified by documented assessment of participation in group task achievement and social interaction, explored within the contexts of family, school, and work.

1.3 Identify physical assets.
Achievement Measure: Assets are identified by documented assessment of mobility, strength, endurance, agility, and acuteness of hearing, speech, and vision.

2. Enhancing Individual Strengths

2.1 Determine strategies to improve individual assets.
Achievement Measure: Action plans describe necessary acceleration or special assistance needed to improve or adapt to specific limitations.

2.2 Examine ways to use strengths to best advantage.
Achievement Measure: Examination yields examples of ways to use individual strengths to contribute as a student, as a family member, as a citizen, and as a worker.

3. **Practicing Independent Living Skills**

3.1 Develop a plan for health and wellness.
Achievement Measure: Plan focuses on individual dietary needs; strategies for rest, exercise, and stress management; use of leisure time; and establishment of a support system.

3.2 Develop a wardrobe plan.
Achievement Measure: Plan selects clothing based on individual preferences, projected use, ease of maintenance, quality of construction, and price.

3.3 Develop a housing plan.
Achievement Measure: Plan focuses on individual preferences, needs for assistance or adapted environment, and transportation factors.

3.4 Develop a transportation plan.
Achievement Measure: Plan explores locally available alternatives and projects use of public and private transportation to and from school, work, and other community destinations.

3.5 Develop a budget plan.
Achievement Measure: Plan focuses on saving and spending based on short- and long-term goals.

3.6 Examine community services and options for assistance.
Achievement Measure: Examination yields names, addresses, phone numbers, and brief descriptions of services for an assigned number of community agencies.

3.7 Outline a plan for transition from school to employment.
Achievement Measure: Plan compares selected pathways of preparation for employment in terms of individual needs, preferences, aptitudes, and abilities.

3.8 Develop a definition of success.
Achievement Measure: Definition describes desired future roles as a worker, consumer, citizen, and family member.

STRAND: EXPLORING THE WORKPLACE

4. **Exploring the Concept of Work**

4.1 Explore the concepts of work, job, and career.
Achievement Measure: Exploration includes definition of terms and examples.

4.2 Contrast workplaces of the past, present, and future.
Achievement Measure: Descriptions focus on location and methods of providing products or services.

4.3 Explore worker requirements and expectations.
Achievement Measure: Requirements include communication/presentation skills, teamwork skills, problem-solving skills, flexibility, customer service skills; expectations include a safe work environment, an appropriate orientation to the job, and fair evaluation of work performance.

5. **Exploring Work Attitudes**

5.1 Investigate ways to manage resources.
Achievement Measure: Investigation focuses on techniques for managing time, money, equipment and supplies, and reputation or public image.

5.2 Demonstrate techniques for collaboration and teaming.
Achievement Measure: Techniques include seeing others' points of view, encouraging others to use their strengths, appreciating all contributions, clarifying and expanding on others' comments and suggestions, employing a problem-solving method, and giving credit for contributions.

5.3 Describe ways to take responsibility.
Achievement Measure: Ways include (but are not limited to) adhering to safety regulations, employing the spirit of customer service, resolving conflict, working to deadlines, keeping a clean work station, conserving resources, completing assignments, following directions, being on time, and being able to access resources for tasks.

6. **Documenting Occupational Interests and Aptitudes**

6.1 Document occupational interests
Achievement Measure: Documentation includes results of one or more occupational interest inventories.

6.2 Document occupational aptitudes and talents.
Achievement Measure: Documentation consists of results of vocational assessment.

6.3 Document current occupational skills.
Achievement Measure: Documentation is comprised of a record of competencies classified as technical or employability skills, such as computer literacy, communication skills, or computation ability.

RELATED ACADEMIC STANDARDS OF LEARNING

Academic SOLs are an essential component of vocational education and are required to be successful in an occupational field. The identification of related academic SOLs that are reinforced through application in vocational courses supports and enhances academic instruction.

Instruction in EFE programs and courses incorporates and reinforces Virginia SOLs as stated in *Standards of Learning for Virginia Public Schools*, June 1995. Identified on the following pages are specific SOLs that are reinforced in the Introduction level of EFE. Local school divisions may wish to identify additional SOLs as reflected in instructional activities and cooperative efforts with other disciplines.

English

6.1 The student will analyze oral participation in small-group activities.
- Communicate as leader and contributor.
- Evaluate own contributions to discussions.
- Summarize and evaluate group activities.
- Analyze the effectiveness of participant interactions.

6.2 The student will listen critically and express opinions in oral presentations.
- Distinguish between facts and opinions.
- Compare and contrast points of view.
- Present a convincing argument.

6.5 The student will demonstrate comprehension of a variety of selections.
- Identify questions to be answered.
- Make, confirm, or revise predictions as needed.
- Use context clues to read unfamiliar words.
- Draw conclusions and make inferences based on explicit and implied information.
- Organize information for use in written and oral presentations.
- Compare and contrast information about one topic contained in different selections.

6.7 The student will write narratives, descriptions, and explanations.
- Use a variety of planning strategies to generate and organize ideas.
- Establish central idea, organization, elaboration, and unity.
- Select vocabulary and information to enhance the central idea, tone, and voice.
- Expand and embed ideas by using modifiers, standard coordination, and subordination in complete sentences.
- Revise writing for clarity.
- Edit final copies for correct use of language: subject-verb and pronoun antecedent agreement, consistent tense inflections, and adverb and adjective usage.
- Edit final copies for writing mechanics: format, capitalization, punctuation, and spelling.

6.8 The student will use writing as a tool for learning in all subjects.
- Make lists.
- Paraphrase what is heard or read.
- Summarize what is heard or read.
- Connect knowledge within and across disciplines.
- Synthesize information to construct new concepts.

6.9 The student will select the best sources for a given purpose, including atlases, dictionaries, globes, interviews, telephone directories, encyclopedias, electronic databases, and the Reader's Guide.

7.1 The student will give and seek information in conversations and in group discussions.
- Use oral vocabulary and style appropriate for listeners.
- Communicate ideas and information orally in an organized and succinct manner.
- Ask probing questions to seek elaboration and clarification of ideas.
- Make supportive statements to communicate agreement or acceptance of others' ideas.

7.3 The student will identify persuasive messages in nonprint media, including television, radio, and films.

- Identify persuasive technique used.
- Distinguish between fact and opinion.

7.6 The student will read and understand information from varied sources.

- Use knowledge of text structures to aid comprehension.
- Make, confirm, or revise predictions as needed.
- Distinguish fact from opinion in newspapers, magazines, and other print media.
- Summarize what is read.
- Organize and synthesize information for use in written and oral presentations.

7.8 The student will develop narrative, expository, persuasive, and technical writings.

- Apply knowledge of prewriting strategies.
- Elaborate the central idea in an organized manner.
- Choose vocabulary and information that will cause a reader to perceive images and tone.
- Use clauses and phrases to embed context into sentences.
- Revise writing for clarity.
- Edit final copies to ensure correct use of homonyms, pronoun-antecedent agreement, subject-verb agreement, and verb tense consistency.
- Edit final copies to ensure correct spelling, capitalization, punctuation, and format.
- Use available technology.

7.9 The student will use a word processor to plan, draft, revise, and publish some writings.

- Use available word processing tools to check spelling, style, and grammar.

7.10 The student will apply knowledge of resources in preparing written and oral presentations.

- Use print and electronic sources to locate books and articles.
- Use a thesaurus to select more exact descriptive, specific, or effective vocabulary for writing.
- Use graphic organizers to organize information.
- Credit secondary reference sources.

8.4 The student will comprehend what is read from a variety of sources.

- Draw on background knowledge and knowledge of text structure to understand selections.
- Analyze details for relevance and accuracy.
- Read and follow instructions to assemble a model or simple structure.
- Evaluate and synthesize information to apply in written and oral presentations.

8.5 The student will write in a variety of forms, including narrative, expository and persuasive writings.

- Use prewriting strategies to generate and organize ideas.
- Focus on elaboration and organization.
- Select specific vocabulary and information.
- Use standard sentence formation, eliminating comma splices and other nonstandard forms of sentences that distract readers.

- Revise writing for word choice, appropriate organization, consistent point of view, and transitions among paragraphs.
- Edit final copies to ensure correct use of pronoun case, verb tense inflections, and adjective and adverb comparisons.
- Edit final copies to ensure correct spelling, capitalization, punctuation, and format.
- Use available technology.

8.6 The student will analyze mass media messages.
- Identify the persuasive technique being used.
- Describe the possible cause-effect relationships between mass media coverage and public opinion trends.
- Evaluate advertisements, editorials, and feature stories for relationships between intent and factual content.

9.4 The student will read and analyze a variety of print materials.
- Identify a hypothesis to be confirmed, disproved, or modified.
- Evaluate clarity and accuracy of information.
- Synthesize information from sources and apply it in written and oral presentations.
- Identify questions not answered by a selected text.
- Extend general and specialized vocabulary through reading and writing.
- Read and follow instructions to use computer software, assemble or construct models or equipment, or complete a project.

9.6 The student will develop narrative, literary, expository, and technical writings to inform, explain, analyze, or entertain.
- Plan and organize writing.
- Communicate clearly the purpose of the writing.
- Write clear, varied sentences.
- Use specific vocabulary and information.
- Arrange paragraphs into a logical progression.
- Revise writing for clarity.
- Edit final copies for correct use of language, spelling, punctuation, and capitalization.

9.8 The student will use electronic databases to access information.
- Identify key terms.
- Narrow the focus of a search.
- Scan and select resources.

History and Social Sciences

6.2 The student will analyze and explain Americans' responses to industrialization and urbanization, with emphasis on
- muckraking literature and the rise of the Progressive Movement;
- women's suffrage and temperance movements, and their impact on society;
- child labor, working conditions, and the rise of organized labor;
- political changes at the local, state, and national levels; and
- improvements in standards of living, life expectancy, and living conditions.

7.6 The student will explain the structure and operation of the United States economy as compared with other economies, with emphasis on

- the basic concepts of free market, as described by Adam Smith, and of communism, as described by Karl Marx;
- the concepts of supply and demand, scarcity, choices, trade-offs, private ownership, in centives, consumer sovereignty, markets, and competition;
- private and public financial institutions;
- the economic impact of consumption, saving and investment, and borrowing by individuals, firms, and governments; and
- the differences between free market, centrally planned, and mixed economies.

7.7 The student will describe the role of governments in the United States economy, with emphasis on

- provision of public goods and services;
- protection of consumer rights, contracts, and property rights;
- the impact of government taxation, borrowing, and spending on individuals and on the production and distribution of goods and services; and
- the role of the Federal Reserve System and the impact of monetary policy on the money supply and interest rates.

9.9 The student will analyze and explain the effects of the Industrial Revolution, in terms of

- the rise of industrial economies and their link to imperialism and colonialism;
- how scientific and technological changes, including the inventions of Watt, Bessemer, and Whitney, brought about massive social and cultural change;
- the emergence of capitalism and free enterprise as a dominant economic pattern;
- responses to capitalism including utopianism, socialism, and communism;
- how the status of women and children reflected changes in society;
- the evolution of work and labor, including the slave trade, mining and manufacturing, and the union movement;
- applying economic reasoning and cost-benefit analysis to societal issues; and
- the transformation of Asia and Africa by expanding European commercial power.

Mathematics

6.7 The student will use estimation strategies to solve multistep practical problems involving whole numbers, decimals, and fractions.

6.8 The student will solve multistep consumer application problems involving fractions and decimals and present data and conclusions in paragraphs, tables, or graphs.

7.6 The student will

- solve practical problems involving basic operations with integers by formulating rules for operating with integers and using a number line to compute; and
- explain the need for integers, using examples from real-life situations.

7.7 The student will use proportions to solve practical problems, including scale drawings that contain whole numbers, fractions, decimals, and percents.

7.15 The student will investigate and describe the difference between the probability of an event found through simulation versus the theoretical probability of that same event.

8.4 The student will solve practical problems involving whole numbers, integers, and rational numbers, including percents. Problems will be of varying complexities, involving real-life data.

Science

6.9 The student will investigate and understand that organisms depend on other organisms and the nonliving components of the environment. Key concepts include
- producers, consumers, and decomposers;
- food webs and food pyramids; and
- cycles (water, carbon dioxide/oxygen, nitrogen).

6.11 The student will investigate and understand public policy decisions relating to the environment. Key concepts include
- management of renewable resources (water, air, plant life, animal life);
- management of nonrenewable resources (coal, oil, natural gas, nuclear power); and
- cost/benefit tradeoffs in conservation policies.

LS.4 The student will investigate and understand that the basic needs of organisms must be met in order to carry out life processes. Key concepts include
- plant needs (light and energy sources, water, gases, nutrients);
- animal needs (food, water, gases, shelter, space); and
- factors that influence life processes.

LS.8 The student will investigate and understand that interactions exist among members of a population. Key concepts include
- competition, cooperation, social hierarchy, territorial imperative; and
- influence of behavior on population interactions.

ES.7 The student will investigate and understand the differences between renewable and nonrenewable resources. Key concepts include
- fossil fuels, minerals, rocks, water, and vegetation;
- advantages and disadvantages of various energy sources;
- resources found in Virginia;
- use of resources and their effects on standards of living; and
- environmental costs and benefits.

Computer/Technology Skills

C/T8.1 The student will communicate through application software.
- Compose and edit a multipage document at the keyboard, using word processing skills and the writing process steps.
- Communicate with spreadsheets by entering data and setting up formulas, analyzing data, and creating graphs or charts to visually represent data.
- Communicate with databases by defining fields and entering data, sorting, and producing reports in various forms.

- Use advanced publishing software, graphics programs, and scanners to produce page layouts.
- Integrate databases, graphics, and spreadsheets into word-processed documents.

C/T8.2 The student will communicate through networks and telecommunication.
- Use local and worldwide network communication systems.
- Develop hypermedia "home page" documents that can be accessed by worldwide networks.

C/T8.3 The student will have a basic understanding of computer processing, storing, retrieval, and transmission technologies and a practical appreciation of the relevant advantages and disadvantages of various processing, storage, retrieval, and transmission technologies.

C/T8.4 The student will process, store, retrieve, and transmit electronic information.
- Use search strategies to retrieve electronic information.
- Use electronic encyclopedias, almanacs, indexes, and catalogs to retrieve and select relevant information.
- Use laser discs with a computer in an interactive mode.
- Use local and wide-area networks and modem-delivered services to access and retrieve information from electronic databases.
- Use databases to perform research.

LEVEL I

Recommended Grade Levels: 9,10,11 Prerequisite: None

Course Options:

Disadvantaged (18 weeks) 9077
Disadvantaged (other than 18 weeks) 9078
Disabled (18 weeks) 9084
Disabled (other than 18 weeks) 9085

Students investigate various occupational fields, examine occupational requirements, and select a career pathway. They begin to focus on improving and gaining skills required for specific occupations. They practice solving real-world problems in the home, in school, and in the workplace.

Tasks/Competencies

STRAND: FOCUSING INDIVIDUAL STRENGTHS AND INTERESTS ON THE WORKPLACE

1. Investigating Occupational Fields

1.1 Compare occupations involving agriculture, natural resources, and the environment.
Achievement Measure: Comparison includes major responsibilities; working conditions; education/training requirements for selected entry-, technical-, and professional-level jobs; salary ranges; and opportunities for advancement.

1.2 Compare occupations involving business, office, and management responsibilities.
Achievement Measure: Comparison includes major responsibilities; working conditions; education/training requirements for selected entry-, technical-, and professional-level jobs; salary ranges; and opportunities for advancement.

1.3 Compare occupations involving health services.
Achievement Measure: Comparison includes major responsibilities; working conditions; education/training requirements for selected entry-, technical-, and professional-level jobs; salary ranges; and opportunities for advancement.

1.4 Compare occupations involving marketing and distribution of products and services.
Achievement Measure: Comparison includes major responsibilities; working conditions; education/training requirements for selected entry-, technical-, and professional-level jobs; salary ranges; and opportunities for advancement.

1.5 Compare occupations involving technological systems.
Achievement Measure: Comparison includes major responsibilities; working conditions; education/training requirements for selected entry-, technical-, and professional-level jobs; salary ranges; and opportunities for advancement.

1.6 Compare occupations involving work and family.
Achievement Measure: Comparison includes major responsibilities; working conditions; education/training requirements for selected entry-, technical-, and professional-level jobs; salary ranges; and opportunities for advancement.

2. **Adapting Individual Assets to Occupations**

2.1 Select occupations areas for further investigation.
Achievement Measure: Occupations are selected according to criteria which include individual interest and sufficient local or regional labor demand

2.2 Determine benefits/limitations of various occupational roles.
Achievement Measure: Determination is focused on areas of wages, opportunities for advancement, and working conditions.

2.3 Determine skills required for specific occupations.
Achievement Measure: Determination includes technical, communication, and human relations skills.

2.4 Determine special knowledge required for success in the global job market.
Achievement Measure: Knowledge includes information about people of different cultures or ethnic customs, economic conditions of various countries or regions, primary industries or occupations in different areas, and ways in which different cultures enrich the work environment.

2.5 Develop strategies to acquire required skills.
Achievement Measure: Strategies include acceleration or assistive technology necessary to gain selected skills.

2.6 Select a career pathway.
Achievement Measure: Criteria for selection include time, cost, and accessibility.

3. **Solving Problems in the Workplace**

3.1 Investigate problems involving customer service.
Achievement Measure: Solution is determined via problem-solving process; problem involves predictable and unpredictable circumstances.

3.2 Investigate problems involving conflict on the job.
Achievement Measure: Solution is determined via problem-solving process; problem involves predictable and unpredictable circumstances.

3.3 Investigate problems involving resource management.
Achievement Measure: Solution is determined via problem-solving process; problem involves predictable and unpredictable circumstances.

3.4 Investigate problems involving work ethics.
Achievement Measure: Solution is determined via problem-solving process; problem involves predictable and unpredictable circumstances.

3.5 Investigate problems involving company image.
Achievement Measure: Solution is determined via problem-solving process; problem involves predictable and unpredictable circumstances.

STRAND: GAINING SKILLS FOR INDEPENDENT LIVING

4. Gauging Progress Toward Independent Living

4.1 Modify strategies to improve individual skills.
Achievement Measure: Modifications reflect documented improvement to date in intellectual, social/emotional, and physical skills.

4.2 Predict future trends in independent living.
Achievement Measure: Trends include (but are not limited to) operating in a cashless society, shopping by phone or computer, gathering information through computer networking, working in a home office, and experiencing virtual reality as entertainment.

4.3 Manage transition to unfamiliar situations.
Achievement Measure: Transition focuses on changes in living environment or work assignment.

5. Improving Independent Living Skills

5.1 Demonstrate selected strategies for maintaining individual and family health and wellness.
Achievement Measure: Strategies include nutritional food preparation, leisure interests, and stress management techniques.

5.2 Examine problems related to housing needs.
Achievement Measure: Problems involve housing design, maintenance, and related financial considerations.

5.3 Maintain a wardrobe according to individual needs and responsibilities.
Achievement Measure: Maintenance involves selection of and care for clothing appropriate for school, work, leisure time, and special occasions.

5.4 Develop a plan to manage financial emergencies.
Achievement Measure: Plan selects insurance based on individual needs and encompasses potential emergencies such as repairs or sudden illness.

5.5 Make decisions regarding the use of credit.
Achievement Measure: Decisions are based on study of the costs and uses of bank, retail, and mortgage credit.

5.6 Examine responsibilities of citizenship.
Achievement Measure: Responsibilities include paying taxes, voting in elections, studying community concerns and issues, and obeying laws and regulations.

5.7 Select opportunities for community involvement and leadership.
Achievement Measure: Selection of volunteer service is based on time available, interests, abilities, and community need.

5.8 Determine educational options.
Achievement Measure: Options are based on cost, time required, and entry requirements.

RELATED ACADEMIC STANDARDS OF LEARNING

Academic SOLs are an essential component of vocational education and are required to be successful in an occupational field. The identification of related academic SOLs that are reinforced through application in vocational courses supports and enhances academic instruction.

Instruction in EFE programs and courses incorporates and reinforces Virginia SOLs as stated in *Standards of Learning for Virginia Public Schools,* June 1995. Identified on the following pages are specific SOLs that are reinforced in EFE Level I. Local school divisions may wish to identify additional SOLs as reflected in instructional activities and cooperative efforts with other disciplines.

English

9.2 The student will make planned oral presentations.
- Include definitions to increase clarity.
- Use relevant details to support main ideas.
- Illustrate main ideas through anecdotes and examples.
- Cite information sources.
- Make impromptu responses to questions about presentation.

9.4 The student will read and analyze a variety of print materials.
- Identify a hypothesis to be confirmed, disproved, or modified.
- Evaluate clarity and accuracy of information.
- Synthesize information from sources and apply it in written and oral presentations.
- Identify questions not answered by a selected text.
- Extend general and specialized vocabulary through reading and writing.
- Read and follow instructions to use computer software, assemble or construct models or equipment, or complete a project.

9.6 The student will develop narrative, literary, expository, and technical writings to inform, explain, analyze, or entertain.
- Plan and organize writing.
- Communicate clearly the purpose of the writing.
- Write clear, varied sentences.
- Use specific vocabulary and information.
- Arrange paragraphs into a logical progression.
- Revise writing for clarity.
- Edit final copies for correct use of language, spelling, punctuation, and capitalization.

9.7 The student will credit the sources of both quoted and paraphrased ideas.
- Define the meaning and consequences of plagiarism.
- Distinguish one's own ideas from information created or discovered by others.
- Use a style sheet method for citing secondary sources, such as MLA or APA.

9.8 The student will use electronic databases to access information.
- Identify key terms.
- Narrow the focus of a search.
- Scan and select resources.

10.1 The student will participate in and report small-group learning activities.
- Assume responsibility for specific tasks.
- Participate in the preparation of an outline or summary of the group activity.
- Include all group members in oral presentation.

10.4 The student will read and interpret printed consumer materials.
- Identify essential information needed to operate specific tools, appliances, technology hardware, or other equipment.
- Analyze the information contained in warranties, contracts, job descriptions, and technical descriptions.
- Skim manuals or consumer texts to locate information.
- Compare and contrast product information contained in advertisements with instruction manuals and warranties.
- Apply the information contained in labels, warnings, manuals, directions, applications, and forms to complete simulated or real-world tasks.

10.7 The student will develop a variety of writings with an emphasis on exposition.
- Plan and organize ideas for writing.
- Elaborate ideas clearly through word choice and vivid description.
- Write clear, varied sentences.
- Organize ideas into a logical sequence.
- Revise writing for clarity and content of presentation.
- Edit final copies for correct use of language, spelling, punctuation, and capitalization.
- Use available technology.

10.9 The student will use writing to interpret, analyze, and evaluate ideas.
- Explain concepts contained in literature and other disciplines.
- Translate concepts into simpler or more easily understood terms.

10.10 The student will collect, evaluate, and organize information.
- Organize information from a variety of sources.
- Verify the accuracy and usefulness of information.
- Use available technology.

11.1 The student will make persuasive presentations.
- Organize evidence to support a position.
- Present evidence clearly and convincingly.
- Support and defend ideas and thoughts in public forums.

11.2 The student will analyze and evaluate persuasive presentations.
- Critique the accuracy, relevance, and organization of evidence.
- Critique the clarity and effectiveness of delivery.

11.4 The student will read a variety of print material.

- Use information from texts to clarify or refine understanding of academic concepts.
- Read and follow directions to complete an application for college admission, a scholarship, or for employment.
- Read and follow directions to complete a laboratory experiment.
- Extend general and specialized vocabularies for reading and writing.
- Generalize ideas from selections to make predictions about other texts.

11.7 The student will write in a variety of forms with an emphasis on persuasion.

- Develop a focus for writing.
- Evaluate and cite applicable information.
- Organize ideas in a logical manner.
- Elaborate ideas clearly and accurately.
- Adapt content, vocabulary, voice, and tone to audience, purpose, and situation.
- Revise writing for accuracy and depth of information.
- Edit final copies for correct use of language, spelling, punctuation, and capitalization.

11.8 The student will write, revise, and edit personal and business correspondence to a standard acceptable in the work place and higher education.

- Apply a variety of planning strategies to generate and organize ideas.
- Organize information to support the purpose of the writing.
- Present information in a logical manner.
- Revise writing for clarity.
- Edit final copies for correct use of language, spelling, punctuation, and capitalization.
- Use available technology.

11.9 The student will analyze, evaluate, synthesize, and organize information from a variety of sources into a documented paper dealing with a question, problem, or issue.

- Narrow a topic.
- Develop a plan for research.
- Collect information to support a thesis.
- Evaluate quality and accuracy of information.
- Synthesize information in a logical sequence.
- Document sources of information using a style sheet format, such as MLA or APA.
- Revise writing for clarity of content.
- Edit final copy for correct use of language, format, spelling, punctuation, and capitalization.
- Use available technology.

History and Social Science

9.9 The student will analyze and explain the effects of the Industrial Revolution, in terms of

- the rise of industrial economies and their link to imperialism and colonialism;
- how scientific and technological changes, including the inventions of Watt, Bessemer, and Whitney, brought about massive social and cultural change;
- the emergence of capitalism and free enterprise as a dominant economic pattern;
- responses to capitalism including utopianism, socialism, and communism;
- how the status of women and children reflected changes in society;

- the evolution of work and labor, including the slave trade, mining and manufacturing, and the union movement;
- applying economic reasoning and cost-benefit analysis to societal issues; and
- the transformation of Asia and Africa by expanding European commercial power.
- the evolution of work and labor, including the slave trade, mining and manufacturing, and the union movement;
- applying economic reasoning and cost-benefit analysis to societal issues; and
- the transformation of Asia and Africa by expanding European commercial power.

10.3 The student will explain how
- geographic regions change over time;
- characteristics of regions have led to regional labels;
- regional landscapes reflect the cultural characteristics of their inhabitants as well as historical events; and
- technological advances have led to increasing interaction among regions.

10.4 The student will analyze how certain cultural characteristics can link or divide regions, in terms of language, ethnic heritage, religion, political philosophy, social and economic systems, and shared history.

10.6 The student will analyze past and present trends in human migration and cultural interaction as they are influenced by social, economic, political, and environmental factors.

10.10 The student will analyze the patterns of urban development, in terms of site and situation, the function of towns and cities, and problems related to human mobility, social structure, and the environment.

10.12 The student will analyze the patterns and networks of economic interdependence, with emphasis on formation of multi national economic unions, international trade, and the theory of competitive advantage, in terms of job specialization, competition for resources, and access to labor, technology, transportation, and communications.

10.14 The student will analyze the forces of conflict and cooperation as they influence
- the way in which the world is divided among independent countries and dependencies;
- disputes over borders, resources, and settlement areas;
- the historic and future ability of nations to survive and prosper; and
- the role of multinational organizations.

11.7 The student will analyze the impact of immigration on American life, in terms of
- contributions of immigrant groups and individuals; and
- ethnic conflict and discrimination.

11.8 The student will summarize causes and effects of the Industrial Revolution, with emphasis on
- new inventions and industrial production methods;
- new technologies in transportation and communication;
- incentives for capitalism and free enterprise;
- the impact of immigration on the labor supply and the movement to organize workers;
- government policies affecting trade, monopolies, taxation, and money supply;

- expansion of international markets; and
- the impact of industrialization, urbanization, and immigration on American society.

11.14 The student will demonstrate an understanding of domestic policy issues in contemporary American society by
- comparing conservative and liberal economic strategies;
- explaining current patterns of Supreme Court decisions and evaluating their impact; and
- comparing the positions of the political parties and interest groups on major issues.

11.18 The student will develop skills in discussion, debate, and persuasive writing with respect to enduring issues and determine how divergent viewpoints have been addressed and reconciled. Such issues include
- civil disobedience vs. the rule of law;
- slavery and its impact;
- the relationship of government to the individual in economic planning and social programs;
- freedom of the press vs. the right to a fair trial;
- the tension between majority rule and minority rights;
- problems of intolerance toward racial, ethnic, and religious groups in American society; and
- the evolution of rights, freedoms, and protections through political and social movements.

Mathematics

A.1 The student will solve linear equations and inequalities in one variable, solve literal equations (formulas) for a given variable and apply these skills to solve practical problems. Graphing calculators will be used to confirm algebraic solutions.

A.4 The student will use matrices to organize and manipulate data, including matrix addition, subtraction, and scalar multiplication. Data will arise from business, industrial, and consumer situations.

G.3 The student will solve practical problems involving complementary, supplementary, and congruent angles that include vertical angles, angles formed when parallel lines are cut by a transversal, and angles in polygons.

G.9 The student will use measures of interior and exterior angles of polygons to solve problems. Tessellations and tiling problems will be used to make connections to art, construction, and nature.

G.12 The student will make a model of a three-dimensional figure from a two-dimensional drawing and make a two-dimensional representation of a three-dimensional object. Models and representations will include scale drawings, perspective drawings, blueprints, or computer simulations.

G.14 The student, given similar geometric objects, will use proportional reasoning to solve practical problems; investigate relationships between linear, square, and cubic measures; and describe how changes in one of the measures of the object affect the others.

ES.7 The student will investigate and understand the differences between renewable and nonrenewable resources. Key concepts include

- fossil fuels, minerals, rocks, water, and vegetation;
- advantages and disadvantages of various energy sources;
- resources found in Virginia;
- use of resources and their effects on standards of living; and
- environmental costs and benefits.

LEVEL II

Recommended Grade Levels: 10,11,12 Prerequisite: None

Course Options:

Disadvantaged (18 weeks) 9079
Disadvantaged (other than 18 weeks) 9080
Disabled (18 weeks) 9086
Disabled (other than 18 weeks) 9087

Students begin to make the transition from school to work by gaining technical skills, conducting a job search, and maintaining successful employment by demonstrating positive work traits and attitudes and continuing to develop technical skills. They focus on balancing their roles of worker, family member, and citizen.

Tasks/Competencies

STRAND: MAKING THE TRANSITION TO EMPLOYMENT

1. Gaining Technical Skills

1.1 Examine tasks performed by workers in selected jobs.
Achievement Measure: Examination yields selection of a specific job for technical study.

1.2 Select job tasks to be mastered.
Achievement Measure: Tasks are selected according to intellectual and physical abilities.

1.3 Demonstrate job tasks according to industry standard.
Achievement Measure: Demonstration (assisted or unassisted) of each task meets predetermined criteria.

1.4 Develop a plan for additional training.
Achievement Measure: Plan identifies tasks or skills to be mastered and how, when, and where training will take place.

2. Searching for Employment

2.1 Locate job opportunities.
Achievement Measure: Location results in a list of local job openings in field of interest, along with basic information about each employer (location, product or service provided, directions for application).

2.2 Complete the job application process.
Achievement Measure: Process includes an accurately and neatly completed application form, letter of application, and interview appointment

2.3 Take employment tests.
Achievement Measure: Tests are completed and graded by company representative according to business/industry standards.

2.4 Participate in a job interview.
Achievement Measure: Acceptable participation includes demonstrating appropriate grooming and appearance, providing requested information, and asking appropriate questions.

2.5 Follow up application process.
Achievement Measure: Follow-up includes a letter or phone call to the employer and self-evaluation of interview performance

2.6 Make a decision regarding a job offer.
Achievement Measure: Decision to accept or reject an offer is based on a list of benefits and disadvantages of a potential job and trade-offs to be made.

3. Maintaining Successful Employment

3.1 Display positive work traits and attitudes.
Achievement Measure: Positive attitudes are associated with good self management, teamwork, and problem-solving

3.2 Seek out opportunities for continuing education and retraining.
Achievement Measure: Search yields a list of options and benefits of each.

3.3 Identify strategies for job change.
Achievement Measure: Strategies include procedures for terminating employment, requesting reassignment, and evaluating readiness for advancement.

3.4 Use elements of business/social protocol to enhance opportunities for success.
Achievement Measure: Elements of protocol include office politics, conduct/dress codes, relationships with co-workers and supervisors, protocol for special occasions, and ways business is conducted in different countries and cultures.

STRAND: MAKING THE TRANSITION TO INDEPENDENT LIVING

4. Balancing Work and Family Roles

4.1 Summarize a resource management plan.
Achievement Measure: Plan briefly describes strategies for managing time, energy, and use of resources for leisure, work, social, educational and family activities.

4.2 Assume responsibilities of family membership.
Achievement Measure: Responsibilities are outlined and performance of specific tasks is recorded.

4.3 Use techniques to improve family relationships and communication.
Achievement Measure: Techniques include (but are not limited to) problem solving, conflict resolution, active listening, goal-setting, and financial management.

5. **Contributing to the Community**

5.1 Keep informed of community events and issues.
Achievement Measure: Methods of keeping informed may include maintaining a calendar, reading newspapers or periodicals, discussing issues with others, and observing political activities.

5.2 Contribute to community decisions regarding, for example, environmental issues, economic development, safety, and public transportation.
Achievement Measure: Contributions may include voting, attending meetings, and letters to the editor.

5.3 Serve as an advocate for people with special needs in the community and in the workplace.
Achievement Measure: Advocacy may include modeling behavior, teaching or training others, publicizing both needs and contributions of a individuals or a group.

RELATED ACADEMIC STANDARDS OF LEARNING

Academic SOLs are an essential component of vocational education and are required to be successful in an occupational field. The identification of related academic SOLs that are reinforced through application in vocational courses supports and enhances academic instruction.

Instruction in EFE programs and courses incorporates and reinforces Virginia SOLs as stated in *Standards of Learning for Virginia Public Schools,* June 1995. Identified on the following pages are specific SOLs that are reinforced in EFE Level II. Local school divisions may wish to identify additional SOLs as reflected in instructional activities and cooperative efforts with other disciplines.

English

10.1 The student will participate in and report small-group learning activities.
- Assume responsibility for specific tasks.
- Participate in the preparation of an outline or summary of the group activity.
- Include all group members in oral presentation.

10.2 The student will critique oral reports of small-group learning activities.
- Evaluate one's own role in preparation and delivery of oral reports.
- Evaluate effectiveness of group process in preparation and delivery of oral reports.

10.4 The student will read and interpret printed consumer materials.
- Identify essential information needed to operate specific tools, appliances, technology hardware, or other equipment.
- Analyze the information contained in warranties, contracts, job descriptions, and technical descriptions.
- Skim manuals or consumer texts to locate information.
- Compare and contrast product information contained in advertisements with instruction manuals and warranties.
- Apply the information contained in labels, warnings, manuals, directions, applications, and forms to complete simulated or real-world tasks.

11.1 The student will make persuasive presentations.
- Organize evidence to support a position.
- Present evidence clearly and convincingly.
- Support and defend ideas and thoughts in public forums.

11.2 The student will analyze and evaluate persuasive presentations.
- Critique the accuracy, relevance, and organization of evidence.
- Critique the clarity and effectiveness of delivery.

11.4 The student will read a variety of print material.
- Use information from texts to clarify or refine understanding of academic concepts.
- Read and follow directions to complete an application for college admission, a scholarship, or for employment.
- Read and follow directions to complete a laboratory experiment.
- Extend general and specialized vocabularies for reading and writing.
- Generalize ideas from selections to make predictions about other texts.

11.7 The student will write in a variety of forms with an emphasis on persuasion.
- Develop a focus for writing.
- Evaluate and cite applicable information.
- Organize ideas in a logical manner.
- Elaborate ideas clearly and accurately.
- Adapt content, vocabulary, voice, and tone to audience, purpose, and situation.
- Revise writing for accuracy and depth of information.
- Edit final copies for correct use of language, spelling, punctuation, and capitalization.

11.8 The student will write, revise, and edit personal and business correspondence to a standard acceptable in the work place and higher education.
- Apply a variety of planning strategies to generate and organize ideas.
- Organize information to support the purpose of the writing.
- Present information in a logical manner.
- Revise writing for clarity.
- Edit final copies for correct use of language, spelling, punctuation, and capitalization.
- Use available technology.

11.9 The student will analyze, evaluate, synthesize, and organize information from a variety of sources into a documented paper dealing with a question, problem, or issue.
- Narrow a topic.
- Develop a plan for research.
- Collect information to support a thesis.
- Evaluate quality and accuracy of information.
- Synthesize information in a logical sequence.
- Document sources of information using a style sheet format, such as MLA or APA.
- Revise writing for clarity of content.
- Edit final copy for correct use of language, format, spelling, punctuation, and capitalization.
- Use available technology.

12.1 The student will make a 5-10 minute formal oral presentation.

- Choose the purpose of the presentation: to defend a position, to entertain an audience, or to explain information.
- Use a well-structured narrative or logical argument.
- Use details, illustrations, statistics, comparisons, and analogies to support purposes.
- Use visual aids or technology to support presentation.

12.4 The student will read a variety of print material.

- Identify information needed to conduct a laboratory experiment or product evaluation.
- Draw conclusions regarding the quality of a product based on analysis of the accompanying warranty and instruction manual.
- Evaluate the quality of informational texts and technical manuals.
- Read and follow instructions to install a software program.

12.7 The student will develop expository and technical writings.

- Consider audience and purpose when planning for writing.
- Present ideas in a logical sequence.
- Elaborate ideas clearly and accurately.
- Revise writing for depth of information and technique of presentation.
- Edit final copies for correct use of language, spelling, punctuation, and capitalization.

12.8 The student will write documented research papers.

- Evaluate the accuracy and usefulness of information.
- Synthesize information to support the thesis.
- Present information in a logical manner.
- Cite sources of information using a standard method of documentation.
- Edit for correct use of language, capitalization, punctuation, and spelling in final copies.
- Use available technology.

History and Social Science

10.10 The student will analyze the patterns of urban development, in terms of site and situation, the function of towns and cities, and problems related to human mobility, social structure, and the environment.

10.12 The student will analyze the patterns and networks of economic interdependence, with emphasis on formation of multi national economic unions, international trade, and the theory of competitive advantage, in terms of job specialization, competition for resources, and access to labor, technology, transportation, and communications.

10.13 The student will distinguish between developed and developing countries and relate the level of economic development to the quality of life.

10.14 The student will analyze the forces of conflict and cooperation as they influence

- the way in which the world is divided among independent countries and dependencies;
- disputes over borders, resources, and settlement areas;
- the historic and future ability of nations to survive and prosper; and
- the role of multinational organizations

11.7 The student will analyze the impact of immigration on American life, in terms of
- contributions of immigrant groups and individuals; and
- ethnic conflict and discrimination.

11.8 The student will summarize causes and effects of the Industrial Revolution, with emphasis on
- new inventions and industrial production methods;
- new technologies in transportation and communication;
- incentives for capitalism and free enterprise;
- the impact of immigration on the labor supply and the movement to organize workers;
- government policies affecting trade, monopolies, taxation, and money supply;
- expansion of international markets; and
- the impact of industrialization, urbanization, and immigration on American society.

11.14 The student will demonstrate an understanding of domestic policy issues in contemporary American society by
- comparing conservative and liberal economic strategies;
- explaining current patterns of Supreme Court decisions and evaluating their impact; and
- comparing the positions of the political parties and interest groups on major issues.

12.5 The student will identify and explain fundamental concepts of democracy, with emphasis placed on equality of all citizens under the law, the fundamental worth and dignity of the individual, majority rule and minority rights, the necessity of compromise, individual freedom, and the rule of law.

12.6 The student will analyze in writing, discussion, and debate current issues confronting local, state, and national governments in terms of perennial challenges to democracies, including conflicts between
- majority rule and minority rights;
- individual rights and the public interest;
- levels of taxation and the expectation of public services; and
- state and national authority in a federal system.

12.9 The student will identify and distinguish among the units of local governments in Virginia, including counties, cities, towns, and regional authorities and will analyze a local public issue.

12.10 The student will explain and give current examples of how political parties, interest groups, the media, and individuals influence the policy agenda and decision making of government institutions.

12.11 The student will describe campaigns for national, state, and local elective office, including
- the nominating process;
- campaign funding and spending;
- the influence of media coverage, campaign advertising, and public opinion polls;
- demographic causes and political effects of reapportionment and redistricting;
- voter turnout and the constituencies of the major political parties; and
- the Electoral College.

12.12 The student will explain the rights, responsibilities, and benefits of citizenship in the United States and Virginia.

12.13 The student will develop the skills needed for informed participation in public affairs by
- analyzing public issues;
- evaluating candidates for public office;
- evaluating the performance of public officials; and
- communicating with public officials.

12.14 The student will compare the United States political and economic systems with those of major democratic and authoritarian nations, in terms of
- the structures and powers of political institutions;
- the rights and powers of the governed including grass roots citizen movements;
- economic goals and institutions and the role of government in the economy;
- the relationships between economic freedom and political freedom; and
- the allocation of resources and its impact on productivity.

12.15 The student will analyze the United States market economy, in terms of
- labor, capital, and natural resources;
- the interaction of supply and demand in markets;
- the role of private ownership, private enterprise, and profits;
- the relationships of households, firms, and government;
- labor/management relationships; and
- relationships to the global economy.

12.16 The student will analyze the role of government in the United States economy, with emphasis on
- monetary and fiscal policies;
- interstate commerce and international trade policies;
- providing favorable conditions for markets;
- providing public goods and services;
- protecting the environment; and
- promoting economic growth.

12.17 The student will evaluate the effect of monetary and fiscal policies on personal economic well-being including employment opportunities, purchasing power, credit and interest rates, and opportunities for investment and savings.

12.18 The student will define common economic terms, including productivity, recession, depression, the business cycle, and inflation, and explain and interpret indicators of economic performance, including gross domestic product, consumer price index, unemployment rate, balance of trade, and stock market averages.

Mathematics

A.1 The student will solve linear equations and inequalities in one variable, solve literal equations (formulas) for a given variable and apply these skills to solve practical problems. Graphing calculators will be used to confirm algebraic solutions.

A.4 The student will use matrices to organize and manipulate data, including matrix addition, subtraction, and scalar multiplication. Data will arise from business, industrial, and consumer situations.

*COM.22 The student will solve practical consumer problems that involve analyzing and interpreting graphs, charts, and/or tables.

COM.23 The student will solve mathematical problems using formulas, equations, and functions. Problems will include those related to geometry, business, and leisure (e.g., sports and recreational activities).

Level I or II includes the following 36-week Cooperative Education option, which replaces WECEP (Work Experience Cooperative Education Program).

EFE COOPERATIVE EDUCATION

Recommended Grade Levels: 11,12 Prerequisite: None

Course Options:

Level I Disadvantaged 9020	Level I Disabled 9021
Level II Disadvantaged 9030	Level II Disabled 9031

Students receive school-based and community-based instruction organized around an approved job that leads toward their career goal. The teacher-coordinator, on-the-job training sponsor, parent, and student develop an individualized training plan that identifies learning experiences according to the student's occupational objective. The on-the-job paid training is an extension of the classroom instruction coordinated by the classroom teacher into a coherent set of performance objectives and skills.

Tasks/Competencies

Teacher-coordinators may use the following list of V-TECS Workplace Skills as a basis for classroom instruction when the cooperative education option is implemented. The list should be validated by the local vocational advisory committee to meet the needs and requirements of students and employers. In addition to these workplace skills, the teacher-coordinator should obtain technical competencies from documents published by the vocational program service related to the student's occupational objective.

The instructional elements that accompany the V-TECS Workplace Skills are available through V-TECS DIRECT. Teachers may access these elements on disk (ASCII format only) by ordering item 601-2 from VVCRC, 2200 Mountain Road, Glen Allen, VA 23060, (804) 261-5075, or online from **vvcrc@pen.va.us**.

A. Developing an Employment Plan

1. Match interests to employment area.
2. Match aptitudes to employment area.
3. Identify short-term work goals.
4. Match attitudes to job area.
5. Match personality type to job area.
6. Match physical capabilities to job area.
7. Identify career information from counseling sources.
8. Demonstrate a drug-free status.

B. Seeing and Applying for Employment Opportunities

1. Locate employment opportunities.
2. Identify job requirements.
3. Locate resources for finding employment.
4. Prepare a resume.
5. Prepare for job interview.
6. Identify conditions for employment.
7. Evaluate job opportunities.
8. Identify steps in applying for a job.

B. 9. Write job application letter.
10. Write interview follow-up letter.
11. Complete job application form.
12.. Identify attire for job interview.

C. **Accepting Employment**
1. Apply for social security number.
2. Complete state and federal tax forms.
3. Accept or reject employment offer.
4. Complete Employee's Withholding Allowance Certificate Form W-4..

D. **Communicating on the Job**
1. Communicate orally with others.
2. Use telephone etiquette.
3. Interpret the use of body language.
4. Prepare written communication.
5. Follow written directions.
6. Ask questions about task.

E. **Interpreting the Economics of Work**
1. Identify the role of business in the economic system.
2. Describe the responsibilities of employee.
3. Describe the responsibilities of employer or management.
4. Investigate opportunities and options for business ownership.
5. Assess entrepreneurship skills.

F. **Maintaining Professionalism**
1. Participate in employment orientation.
2. Assess business image, products, and/or services.
3. Identify positive behavior.
4. Identify company dress and appearance standards.
5. Participate in meetings.
6. Identify work-related terminology.
7. Identify how to treat people with respect.

G. **Adapting and Coping with Change**
1. Identify elements of job transition.
2. Formulate transition plan.
3. Identify implementation procedures for a transition plan.
4. Evaluate the transition plan.
5. Exhibit ability to handle stress.
6. Recognize need to change or quit a job.
7. Write a letter of resignation.

H. **Solving Problems and Critical Thinking**
1. Identify the problem.
2. Clarify purposes and goals.
3. Identify solutions to a problem and their impact.
4. Employ reasoning skills.

H.
5. Evaluate options.
6. Set priorities.
7. Select and implement a solution to a problem.
8. Evaluate results of implemented option.
9. Organize workloads.
10. Assess employer and employee responsibility in solving a problem.

I. Maintaining Safe and Healthy Work Environment

1. Identify safety and health rules/procedures.
2. Demonstrate the knowledge of equipment in the work place.
3. Identify conservation and environmental practices and policies.
4. Act during emergencies.
5. Maintain work area.
6. Identify hazardous substances in the work place.

J. Demonstrating Work Ethics and Behavior

1. Identify established rules, regulations, and policies.
2. Practice cost effectiveness.
3. Practice time management.
4. Assume responsibility for decisions and actions.
5. Exhibit pride.
6. Display initiative.
7. Display assertiveness.
8. Demonstrate willingness to learn.
9. Identify the value of maintaining regular attendance.
10. Apply ethical reasoning.

K. Demonstrating Technological Literacy

1. Demonstrate basic keyboarding skills.
2. Demonstrate basic knowledge of computing.
3. Recognize impact of technological changes on tasks and people.

L. Maintaining Interpersonal Relationships

1. Value individual diversity.
2. Respond to praise or criticism.
3. Provide constructive praise or criticism.
4. Channel and control emotional reactions.
5. Resolve conflicts.
6. Display a positive attitude.
7. Identify and react to sexual intimidation/harassment.

M. Demonstrating Team Work

1. Identify style of leadership used in team work.
2. Match team member skills and group activity.
3. Work with team members.
4. Complete a team task.
5. Evaluate outcomes.

ALL ASPECTS OF INDUSTRY

According to federal legislation, vocational programs are required to provide for students certain information about an industry being studied. The intent of the legislation is that students gain a total picture of the industry by learning about the following aspects:

- Planning
- Management
- Finances
- Technical and production skills
- Labor and community issues
- Health and safety
- Environmental issues
- Underlying issues of technology

Teachers may use tasks in EFE to lead a discussion into one or more aspects of an industry related to a particular student's occupational objective. The following examples may be helpful.

Aspect: Planning

Introduction:	3.4	Develop a transportation plan.
Level I:	2.1	Select occupational areas for further investigation.
Level II:	3.2	Seek out opportunities for continuing education and training.

Aspect: Management

Introduction:	5.1	Investigate ways to manage resources.
Level I:	4.3	Manage transition to unfamiliar situations.
Level II:	3.4	Use elements of business/social protocol to enhance opportunities for success.

Aspect: Finances

Introduction:	3.5	Develop a budget plan.
Level I:	5.4	Develop a plan to manage financial emergencies.
Level II:	2.6	Make a decision regarding a job offer.

Aspect: Technical and Production Skills

Introduction:	4.3	Explore worker requirements and expectations.
Level I:	1.5	Compare occupations involving technological systems.
Level II:	1.3	Demonstrate job tasks according to industry standards.

Aspect: Labor and Community Issues

Introduction:	5.2	Demonstrate techniques for collaboration and teaming.
Level I:	5.6	Examine responsibilities of citizenship.
Level II:	5.1	Keep informed of community events and issues.

Aspect: Health and Safety

Introduction:	3.1	Develop a plan for health and wellness.
Level I:	5.1	Demonstrate selected strategies for maintaining individual and family health and wellness.
Level II:	3.1	Display positive work traits and attitudes.

Aspect: Environmental Issues

Introduction:	5.3	Describe ways to take responsibility.
Level I:	1.1	Compare occupations involving agriculture, natural resources, and the environment.
Level II:	5.2	Contribute to community decisions regarding, for example, environmental issues, economic development, safety, and a public transportation.

Aspect: Underlying Issues of Technology

Introduction:	2.1	Determine strategies to improve individual assets.
Level I:	4.2	Predict future trends in independent living.
Level II:	3.2	Seek out opportunities for continuing education and retraining.

PART 3: CURRICULUM DEVELOPMENT AIDS

Competency-Based Education

As a vocational offering, EFE must meet the state standards for competency-based programs. Competency-based education (CBE) is an instructional method that enables students to master the knowledge, skills, and behaviors (competencies) required of people who fill specific jobs or life roles. The instructional content of CBE is based on the duties and tasks performed by competent workers, citizens, and family members.

The state standards require that each program be based on validated, role-relevant task statements with standards for competence identified. Teachers are free to select or develop the method of evaluation. Additionally, the standards require that students be notified ahead of time how they will be evaluated and that each student have an individual, permanent competency record of tasks mastered throughout the program.

CBE curriculum differs from traditional curriculum in several important ways.

Competency-Based Curriculum	Traditional Curriculum
Students learn whatever they need to master a specific task.	Students learn concepts and theories and apply them to a variety of tasks.
Program designers begin with role research and analysis.	Program designers begin with a classical definition of the discipline.
Teachers organize their lessons around a task.	Teachers organize their lessons around time.
Students are evaluated according to objective criteria such as industry standards for proficiency.	Students are often evaluated according to group standing or length of time required for learning.
Students exit the program when they have mastered the tasks/competencies.	Everyone remains in the program the same length of time.
A detailed record of student achievement is readily available.	Students get report cards.
Changing technology and future conditions may affect the fundamental makeup of a program.	New discoveries are usually added to the existing body of knowledge.
Teachers use specially developed, locally validated materials and resources to meet student requirements and community conditions.	Teachers rely on textbooks.

CBE has benefits for EFE teachers and students.

- Objectives are clear to everyone.
- Student progress can be closely monitored.
- Provisions are made for variations among diverse learners.
- Instruction emphasizes entry-level competencies.
- System allows for more student involvement than do traditional methods.
- Students are responsible for their own progress.
- Assessment is objective.

The ABCs of Curriculum Development

Developing curriculum involves a series of decisions.

A. What to teach: validated, role-relevant tasks/competencies with standards identified (achievement measures)
B. Who, when, and where to teach: program design
C. How to teach: enabling objectives, instructional strategies, resources.

Task/Competency List

Part 2 contains a Virginia-developed and approved task/competency list for each level of EFE. Teachers should validate the lists and the standards according to the needs and requirements of their students and community employers and modify them to meet local conditions. The local list, however, must reflect the published course description and be based on the task list in Part 2.

Program Design

Local school divisions should ensure that the EFE program is designed according to the goals and objectives outlined in Part 1. Only students belonging to a targeted population as defined in part 1 should be admitted into EFE, and each student must have a customized course of study generated by vocational and academic assessment and leading to enrollment in a regular vocational program or to successful employment.

To best design a student's individual program of study, teachers may wish to move tasks from one level to another. In addition, program design calls for the following.

- Identifying related academic standards and technical skills
- Collaborating with academic and vocational teachers to ensure that rigorous instruction of related knowledge and skills is included in each student's program of study
- Identifying academic and vocational prerequisites and co-requisites
- Identifying where instruction will take place (classroom, laboratory, school-based work site, paid job site)
- Fitting the instruction into the framework of the school schedule.

Instructional Strategies

Teachers may further individualize each task/competency list by

- combining two or more tasks on the same or on different levels
- breaking down a task into two or more tasks
- changing the domain from, for example, psychomotor to cognitive or affective
- revising a task to reflect the appropriate level of learning.

After finalizing the task list, teachers must analyze each task to develop instructional strategies. Task analysis should include the following components:

- Achievement measure
- Conditions of task achievement
- Evaluation method or instrument
- Enabling objectives
- Learning activities
- Related academic standards
- Aspects of industry
- Resources

The achievement measure identified for each task listed in Part 2 suggests the standard of competence expected for that task. Measures primarily identify results of the action to be taken; for example, the measure for "Develop a plan for additional training" tells the student what elements must be included in the plan. Teachers may modify the measures as necessary to fit individual student needs. However, teachers should allow a student extra time or assistance (whether human or technological) to meet the standard or vary the method of assessment rather than lower the level of achievement necessary to show competence.

Aids for task analysis are presented on the following pages:

- Suggested task analysis design
- Sample task analysis
- Task analysis worksheet

TASK ANALYSIS DESIGN

EFE Course
Introduction, Level I, Level II, EFE Cooperative Education

Task/Competency
- Is a terminal task, not a subskill or enabling objective
- Must be locally validated
- Starts with an action verb that is appropriate for the level of learning
- Assumes that academic skills are embedded in the task.

Conditions of Achievement	Achievement Measure	Evaluation Method or Instrument
• Information provided • Equipment/materials supplied • Setting • Actual/simulated environment • **Must be realistic and specific**	Possible elements: • Industry standard • Degree of accuracy • Speed requirements • Job specifications • Group goals, strategies • Stet-by-step procedures • Instructor's results • Instructor's specifications • **Must be specific and appropriate to learning level**	• Documented observation (checklist, etc.) • Written or oral test, worksheet, form • Individual/group self-evaluation • Thesis or report • Must be objective • **Must be based on the achievement measure**

Enabling Objectives/Learning Activities
- Subskills leading to task achievement
- Knowledge necessary for task achievement
- Behaviors or attitudes leading to successful achievement
- Related nice-to-know or able-to-do items
- Objectives related to academic concepts or standards
- Critical thinking/problem-solving processes
- General employability skills that lead to successful achievement in a variety of work settings
- Related prior achievements

Related Academic Standards	Aspects of Industry	Resources
Standards of academic achievement that are reinforced by task performance or that are essential to successful achievement of the task • English • Mathematics • Physical sciences • Social sciences • Fine arts	Information about the industry being studied • Planning • Management • Finances • Technical and Production Skills • Labor and Community Issues • Environmental Issues • Underlying Issues of Technology	• Printed materials such as textbooks, curriculum guides, lesson plans • Business/industry policies/procedures and other materials • Electronic resources • Human resources

SAMPLE TASK ANALYSIS

EFE Course
Level II

Task/Competency
Use elements of business/social protocol to enhance opportunities for success.

Conditions of Achievement	Achievement Measure	Evaluation Method or Instrument
Information provided: • Overview of business/social protocol • Sources of additional information • Various scenarios describing business/social situations	Description of appropriate responses to scenarios involving • office politics • conduct/dress codes • relationships with co-workers and supervisors • etiquette for special occasions • ways business is conducted in different countries and cultures	• Case studies involving the elements of protocol, accompanied by worksheet • Responses rated acceptable or unacceptable according to references used

Enabling Objectives/Learning Activities
- Define *office politics*, and describe how it affects decisions made within a group or company.
- Explain why a company may enforce a certain manner of dress and appearance among workers.
- Compare the school's code of conduct to a professional code of ethics.
- Identify potential legal and ethical issues arising from relationships among co-workers and supervisors.
- Practice introducing self and others in different settings.
- Assess the importance of knowing how business is conducted in foreign countries.
- Identify appropriate topics of conversation in business settings.
- Role play situations involving protocol in business.

Related Academic Standards	Aspects of Industry	Resources
• English 11.4, 12.7 • History 10.13, 11.7, 12.10, 12.14, 12.15	❑ Planning ■ Management ❑ Finances ❑ Technical and Production Skills ■ Labor and Community Issues ❑ Environmental Issues ❑ Underlying Issues of Technology	• *Building a Professional Life*, Chapters 7-9. Hallman & Johnson.

TASK ANALYSIS WORKSHEET

EFE Course		
Task/Competency		
Conditions of Achievement	**Achievement Measure**	**Evaluation Method or Instrument**
Enabling Objectives/Learning Activities		
Related Academic Standards	**Aspects of Industry**	**Resources**

APPENDIX

DEFINITION OF *DISADVANTAGED*

An *academically disadvantaged* student

- scores below the 25th percentile on a standardized achievement or aptitude test
- receives secondary school grades below 2.0 on a 4.0 scale (where the grade A equals 4.0)
- fails to attain minimum academic competencies.

An *economically disadvantaged* family or individual

- is eligible for Aid to Families with Dependent Children under Part A, Title IV of the Social Security Act
- is eligible for benefits under the Food Stamp Act of 1977
- is eligible to be counted for purposes of Section 1005, Chapter I, Title I of the Elementary and Secondary Education Act of 1965.

A *Limited English Proficiency (LEP)* student is a member of another national origin who does not speak and understand the English language in an instructional setting well enough to benefit from vocational studies to the same extent as a student whose primary language is English. LEP students may

- not have been in the United States or may have a native language other than English
- come from environments where a language other than English is dominant
- be American Indian and Alaskan native students and come from environments where a language other than English has a significant impact on their level of English language proficiency
- meet these conditions and have sufficient difficulty speaking, reading, writing, and understanding the English language to deny them the opportunity to learn successfully in classrooms where the language of instruction is English or to participate fully in our society.

In accordance with the requirements of the Office of Gender Equity for Career Development, Virginia Department of Education, the Carl Perkins Act, and other federal and state laws and regulations, this document has been reviewed to ensure that it does not reflect stereotypes based on sex, race, or national origin.

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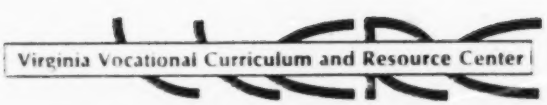
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